AMENDMENTS TO THE CLAIMS

For the convenience of the Examiner, all claims have been presented whether or not an amendment has been made. The claims have been amended as follows:

What is claimed is:

1. **(Currently Amended)** A method for **logging changes that are made during a reorganization process** ~~reorganizing data~~, comprising:

reading each record of a source file associated with **at least one of a plurality of objects** ~~an object~~;

writing each record to a destination file;

identifying changes to the **plurality of objects** ~~object~~ that are made during a reorganization process;

for each change, determining whether the change affects **an object being reorganized** ~~the reorganization process~~;

creating a log file comprising log records, wherein the log records are associated with only those changes that are determined to affect **an object being reorganized** ~~the reorganization process~~;

reading each log record of the log file;

processing each record of the log file to effect the associated change to the destination file; and

replacing the source file with the destination file.

2. **(Original)** A method according to claim 1 wherein the source file is an index file.

3. **(Original)** A method according to claim 1 wherein the source file is a data file.

4. **(Original)** A method according to claim 1 wherein the step of creating a log file is performed in accordance with instructions of a DBMS log routine.

5. **(Original)** A method according to claim 4 wherein the log file contains a

subset of all records processed by the DBMS log routine.

6. **(Original)** A method according to claim 4 wherein the log file records are selected based on a program call established by a reorganization utility.

7. **(Original)** A method according to claim 6 wherein the program call is removed prior to termination of the reorganization utility.

8. **(Currently Amended)** A method for logging changes by a database management system, comprising:

identifying **changes to a plurality of objects that are made** ~~a change to be logged, wherein the change occurs~~ during a reorganization process;

creating a log record based on ~~the~~ **a particular** change;

determining whether the **particular** change affects **an object being reorganized** ~~the reorganization process~~;

storing the log record in a first log file recording selected changes only if the **particular** change is determined to affect **an object being reorganized** ~~the reorganization process~~; and

storing the log record in a second log file **regardless of whether** ~~if~~ the change is ~~not~~ determined to affect **an object being reorganized** ~~the reorganization process~~.

9. **(Original)** A method according to claim 8 wherein the first log file resides in virtual storage.

10. **(Original)** A method according to claim 8 wherein the first log file resides in dataspace.

11. **(Previously Presented)** A method according to claim 8 wherein the first log file resides in hyperspace.

12. **(Original)** A method according to claim 8 wherein the first log file resides in DASD.

13. **(Currently Amended)** An apparatus for **logging changes that are made during a reorganization process** ~~reorganizing data~~, comprising:

means for reading each record of a source file associated with **at least one of a plurality of objects** ~~an object~~;

means for writing each record to a destination file;

means for identifying changes to the **plurality of objects** ~~object~~ that are made during a reorganization process;

means for determining whether each change affects **an object being reorganized** ~~the reorganization process~~;

means for creating a log file comprising log records, wherein the log records are associated with only those changes that are determined to affect **an object being reorganized** ~~the reorganization process~~;

means for reading each log record of the log file;

means for processing each record of the log file to effect the associated change to the destination file; and

means for replacing the source file with the destination file.

14. **(Original)** An apparatus according to claim 13 wherein the source file is an index file.

15. **(Original)** An apparatus according to claim 13 wherein the source file is a data file.

16. **(Original)** An apparatus according to claim 13 wherein the log file is created in accordance with instructions of a DBMS log routine.

17. **(Original)** An apparatus according to claim 16 wherein the log file contains a subset of all records processed by the DBMS log routine.

18. **(Original)** An apparatus according to claim 16 wherein the log file records are selected based on a program call established by a reorganization utility.

19. **(Original)** An apparatus according to claim 18 wherein the program call is removed prior to termination of the reorganization utility.

20. **(Currently Amended)** An apparatus for **logging changes that are made during a reorganization process** ~~reorganizing data~~, comprising:

a processor;

a memory ~~connected~~ **coupled** to said processor **and** storing a program to control the operation of said processor;

the processor operative with the program in the memory to:

read each record of a source file associated with **at least one of a plurality of objects** ~~an object~~;

write each record to a destination file;

identify changes to the **plurality of objects** ~~object~~ that are made during a reorganization process;

for each change, determine whether the change affects **an object being reorganized** ~~the reorganization process~~;

create a log file comprising log records, wherein the log records are associated with only those changes that are determined to affect **an object being reorganized** ~~the reorganization process~~;

read each log record of the log file;

process each record of the log file to effect the associated change to the destination file; and

replace the source file with the destination file.

21. **(Original)** An apparatus according to claim 20 wherein the source file is an index file.

22. **(Currently Amended)** An apparatus according to claim 20 wherein the source file is ~~an~~ **a** data file.

23. **(Original)** An apparatus according to claim 20 wherein the processor is further operative with the program in the memory to create the log file in accordance with

instructions of a DBMS log routine.

24. **(Original)** An apparatus according to claim 23 wherein the log file contains a subset of all records processed by the DBMS log routine.

25. **(Original)** An apparatus according to claim 20 wherein the processor is further operative with the program in the memory to select the log file records based on a program call established by a reorganization utility.

26. **(Original)** An apparatus according to claim 23 wherein the processor is further operative with the program in the memory to remove the program call prior to termination of the reorganization utility.

27. **(Currently Amended)** A computer-readable storage medium encoded with processing instructions for implementing a method for **logging changes that are made during a reorganization process** ~~reorganizing data~~, the processing instructions for directing a computer to perform the steps of:

reading each record of a source file associated with **at least one of a plurality of objects** ~~an object~~;

writing each record to a destination file;

identifying changes to the **plurality of objects** ~~object~~ that are made during a reorganization process;

for each change, determining whether the change affects **an object being reorganized** ~~the reorganization process~~;

creating a log file comprising log records, wherein the log records are associated with only those changes that are determined to affect **an object being reorganized** ~~the reorganization process~~;

reading each log record of the log file;

processing each record of the log file to effect the associated change to the destination file; and replacing the source file with the destination file.

28. **(Currently Amended)** A method for **logging changes that are made during a reorganization process** ~~reorganizing data~~, comprising:

creating an empty destination file;

establishing a program call to process log records;

reading each record of a source file associated with **at least one of a plurality of objects** ~~an object~~;

writing each record to the destination file;

identifying changes to the **plurality of objects** ~~object~~ that are made during a reorganization process;

for each change, determining whether the change affects **an object being reorganized** ~~the reorganization process~~;

employing the established program call to create a log file comprising log records, wherein the log records are associated with only those changes that are determined to affect **an object being reorganized** ~~the reorganization process~~;

removing the established program call;

reading each log record of the log file;

processing each record of the log file to effect the associated change to the destination file; and

replacing the source file with the destination file.

29. **(Previously Presented)** A method according to claim 28 wherein the source file is an index file.

30. **(Previously Presented)** A method according to claim 28 wherein the source file is a data file.

31. **(Currently Amended)** An apparatus for **logging changes that are made during a reorganization process** ~~reorganizing data~~, comprising:

means for creating an empty destination file;

means for establishing a program call to process log records;

means for reading each record of a source file associated with **at least one of a plurality of objects** ~~an object~~;

means for writing each record to the destination file;

mean for identifying changes to the **plurality of objects** ~~object~~ that are made during a reorganization process;

means for determining whether each change affects **an object being reorganized** ~~the reorganization process~~;

means for employing the established program call to create a log file comprising log records, wherein the log records are associated with only those changes that are determined to affect **an object being reorganized** ~~the reorganization process~~;

means for removing the established program call;

means for reading each log record of the log file;

means for processing each record of the log file to effect the associated change to the destination file; and

means for replacing the source file with the destination file.

32. **(Previously Presented)** An apparatus according to claim 31 wherein the source file is an index file.

33. **(Previously Presented)** An apparatus according to claim 31 wherein the source file is a data file.

34. **(Currently Amended)** An apparatus for **logging changes that are made during a reorganization process** ~~reorganizing data~~, comprising:

a processor;

a memory **coupled** ~~connected~~ to said processor **and** storing a program to control the operation of said processor;

the processor operative with the program in the memory to:

create an empty destination file;

establish a program call to process log records;

read each record of a source file associated with **at least one of a plurality of objects** ~~an object~~;

write each record to the destination file;

identify changes to the **plurality of objects** ~~object~~ that are made during a reorganization process;

for each change, determine whether the change affects **an object being reorganized** ~~the reorganization process~~;

employ the established program call to create a log file comprising log records, wherein the log records are associated with only those changes that are determined to affect **an object being reorganized** ~~the reorganization process~~;

remove the established program call;

read each log record of the log file;

process each record of the log file to effect the associated change to the destination file; and

replace the source file with the destination file.

35. **(Previously Presented)** An apparatus according to claim 34 wherein the source file is an index file.

36. **(Currently Amended)** An apparatus according to claim 34 wherein the source file is **a** ~~an~~ data file.

37. **(Currently Amended)** A computer-readable storage medium encoded with processing instructions for implementing a method for **logging changes that are made during a reorganization process** ~~reorganizing data~~, the processing instructions for directing a computer to perform the steps of:

creating an empty destination file;

establishing a program call to process log records;

reading each record of a source file associated with **at least one of a plurality of objects** ~~an object~~;

writing each record to the destination file;

identifying changes to the **plurality of objects** ~~object~~ that are made during a reorganization process;

for each change, determining whether the change affects **an object being reorganized** ~~the reorganization process~~;

employing the established program call to create a log file comprising log records, wherein the log records are associated with only those changes that are determined to affect **an object being reorganized** ~~the reorganization process~~;

removing the established program call;

reading each log record of the log file;

processing each record of the log file to effect the associated change to the destination file; and

replacing the source file with the destination file.